DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-021734

Address: 333 Burma Road **Date Inspected:** 09-Mar-2011

City: Oakland, CA 94607

OSM Arrival Time: 1500 **Project Name:** SAS Superstructure **OSM Departure Time:** 300 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: See Below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Weld Procedures Followed:** N/A **Electrode to specification:** No Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No **Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component:** QBG & Tower

Summary of Items Observed:

Bay 1

This QA inspector performed a random observation for the OBG. During the observation performed it was noted that at Bay 1 ZPMC was in process of welding weld repairs on Re-Built traveler rail assembly. ZPMC CWI Tian Lei was present at this time of this observation and informed this QA inspector of the work that is in process. It was stated that ZPMC had 3 welders and identified the welders by ZPMC welder identification number appointed to then by ZPMC. This QA inspector verified this information for the following location;

WR20368

Weld-20TR2-036-015, 017 WPS-345-FCAW-1G(1F)-ESAB-Repair Welder-053609

1G/CJP/FCAW

WR20368

Weld-20TR2-036-011 WPS-345-SMAW-1G(1F)-Repair Welder-054467

1G/CJP/SMAW

WR20368

Weld- 20TR2-036-013, 009



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WPS-345-SMAW-1G(1F)-Repair Welder-057795 1G/CJP/SMAW

Bay 11

This QA inspector performed a random observation for the OBG. During the observation performed it was noted that at Bay 11 ZPMC was in process of welding on bike path assembly. ZPMC CWI Yu Dong Ping was present at this time of this observation and informed this QA inspector of the work that is in process. It was stated that ZPMC had 1 welder and identified the welder by ZPMC welder identification number appointed to then by ZPMC. This QA inspector verified this information for the following location;

Weld-BK008A2-002 WPS-345-SMAW-1G(1F)-Repair Welder-046769 1G/SMAW/CJP

MT Inspection

This Caltrans QA inspector received ZPMC non-destructive test (NDT) Inspection Notification, Doc. #08499 from ZPMC for Bay 11. This QA inspector performed visual and magnetic particle test (MT) verification for Item 1, 2 after ZPMC had performed their MT inspection of the following locations;

Item 1

WSD1-DPSA6-4-5

Item 2

ESD1-DPSA6-2-5

At the time of the verification it was noted that the above component appeared to be within compliance of the contract documents. See Caltrans Magnetic Particle Test Report (TL6028), dated 03-09-2011 for additional information.

UT Inspection

This Caltrans QA inspector received ZPMC non-destructive test (NDT) Inspection Notification, Doc. #08499 from ZPMC for Bay 11. This QA inspector performed ultrasonic test (UT) verification for Item 3, after ZPMC had performed their UT inspection of the following locations.

Item 3

ESD1-DPSA6-2-3, 4

At the time of the verification it was noted that the above component appeared to be within compliance of the contract documents. See Caltrans Ultrasonic Test Report (TL6027), dated 03-09-2011 for additional information.

Bay 10

This QA inspector observed ZPMC in process of FCAW welding on traveler rail assembly. ZPMC OC inspector was present at this time of this observation and informed this QA inspector of the work that is in process and identified Li Peng Fei as the CWI. It was stated that ZPMC had 9 welders and identified the welders by ZPMC

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welder identification number appointed to then by ZPMC. This QA inspector verified this information for the following location;

Weld- 28TR1-012, 016, 009, 003, 006, 013 WPS-B-P-2212-TC-U5b Welder- 0500363, 057220, 052493 2G/SMAW/CJP

Weld-29TR1-006, 007, 009, 010 WPS-B-T-2132-ESAB Welder- 040302 1G/SMAW/CJP

Weld-26TR2-025 WPS-B-T-2232-ESAB Welder- 040533 2G/FCAW/CJP

Weld-BK16B-001-015-016-017 WPS-B-P-2211-TC-U4c Welder- 040365, 040581 1G/SMAW/CJP

Weld-BK15B-001-015, 020 WPS-B-P-2211-TC-U4c Welder- 040582 1G/SMAW/CJP

Weld-BK15A-001-045 WPS-B-P-2312-TC-P4 Welder- 056364 2G/SMAW/PJP

HSR1 (B) 10144 Re-Built Traveler Rail 20TR2-030 & 20TR2-035

Trial Assembly

This QA inspector observed ZPMC in process of SMAW welding on Lift 12 segment assemblies. ZPMC CWI Wang Li Yang was present at this time of this observation and informed this QA inspector of the work that is in process. It was stated that ZPMC had 4 welders and identified the welders by ZPMC welder identification number appointed to then by ZPMC. This QA inspector verified this information for the following location;

12AE

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Weld- CA6501-002 WPS-B-P-2114-TC-U4b-FCM-1 Welder- 067752 4F/SMAW/CJP

12BE

Weld-SEG3002F-133 WPS-B-P-2113 Welder- 040720 3F/SMAW

12BE

Weld-CA3005C-001 WPS-B-P-2114 Welder- 040484 4F/SMAW

12BE Weld- CA3003D-015 WPS-B-P-2114 Welder- 052910 4F/SMAW

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

"As noted within the contents of this report."

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or 150026784, who represents the Office of Structural Materials for remedial efforts please contact James Devey your project.

| Inspected By: | Hasler,Mike | Quality Assurance Inspector |
|----------------------|-------------|-----------------------------|
| Reviewed By: | Riley,Ken | QA Reviewer |